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New genus and species of Trachyderini (Coleoptera, Cerambycidae, Cerambycinae) from Peru

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Abstract. A new genus and species of Trachyderini (Trachyderina) is described from Peru: *Viracocha limogesi*.

Key words. Ancylocerina, South America, Taxonomy; Trachyderina.

Introduction

According to Monné (2015) and Bezark (2015) Trachyderini Dupont, 1836 is divided in two subtribes: Ancylocerina Thomson, 1864 (with seven genera); and Trachyderina Dupont, 1836 (with one hundred twenty-five genera). Monné (2015) listed one hundred twenty-two genera of Trachyderina in the Neotropical Region. Despite the great number of genera of Trachyderina, it was not possible to include the new species in any of them. Fragoso et al. (1987) separated the subtribes in a key: "Mesocoxal acetabula laterally closed; elytral surface strongly punctate, epipleura sinuous; scutellum small, often depressed; males with the border of sternite 8 projected latero-ventrally beyond the limits of corresponding tergite (verified in *Ancylocera* and *Callancyla*)", conducting to Ancylocerina; and "Mesocoxal acetabula usually open laterally; body, scutellum, antennae and elytral surface highly variable; borders of sternite 8 not laterally projected", conducting to Trachyderina. The shape of the border of the sternite 8, apparently, is variable in Ancylocerina. For example, it is not projected in males of *Cercoptera banonii* Spinola, 1839. As all other features listed to Ancylocerina are variable in Trachyderina, except for the border of sternite 8, they cannot be used to separate the subtribes. It is not the scope of this work to study the subtribes, but if the mesocoxal acetabula are "usually" open in Trachyderina, it can be inferred that they can be closed in some species. Monné and Napp (2000) commented: "Fragoso et al. (1987) established Ancylocerina Thomson (1864) as a subtribe of Trachyderini Dupont, basically by the shape of the brush on the eighth urosternite of the females, formed, as in the Trachyderina, by long-petiolate conchoidal, spatulate and acicular setae, arranged in several rows." Monné and Napp (2000) did not describe sternite 8 in males of Ancylocerina, and did not give differences between the subtribes. We are assuming that all genera with mesocoxal cavities laterally closed belong to Ancylocerina and those that are open belong to Trachyderina. The new genus herein described belongs to the latter.

Materials and Methods

The collection acronyms used in this study are as follows:

IMCQ – Insectarium de Montréal, Québec, Canada;

MNRJ – Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil;

MZSP – Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil;

USNM – National Museum of Natural History, Washington, D.C., USA.

***Viracocha* gen. nov.**

Type species. *Viracocha limogesi* sp. nov.

Description. Body elongate. Head prognathous, about as long as wide (excluding mandibles); distinctly elongate behind eyes. Frons vertical, transverse, moderately large. Antennal tubercles prominent, acuminate towards apex; inner side divergent towards eye. Eyes proportionally small; lower eye lobes much wider than upper eye lobes; linkage between lobes little narrower than upper eye lobe; upper eye lobes well-separated on vertex. Apex of genae projected forward, moderately rounded. Mandibles in males longer than two-thirds of head length; from base to apex curved upward; inner margin pluridentate in large males, vaguely dentate in small males and females; apex acute, obliquely curved inward. Mandibles in females as in male, but little longer than half head length; inner margin as in small males. Maxillary palpomere IV distinctly longer than III, but shorter than II+III. Submentum punctate, slightly depressed, moderately well-delimited. Antennae in male filiform, 12-segmented, longer than 1.5 times body length; outer apex of antennomeres III–XI projected; dorsal surface of antennomeres III–VII longitudinally sulcate; antennomere III almost twice length of scape. Antennae in female serrate, 11-segmented, shorter than body; antennomeres III–VI dorsally longitudinally sulcate.

Prothorax elongate, sub-cylindrical; without lateral tubercles. Pronotum centrally without sexual punctation, without tubercles; lateral sides in male with moderately coarse, abundant punctures, interspersed with minute, dense punctures. Prosternum with sexual punctation in male, formed by moderately fine, abundant punctures on basal three-fourths, interspersed with minute, dense punctures. Prosternal process about as wide as one-fourth of procoxal cavity; parallel-sided, abruptly sloping near apex of coxae. Scutellum small, triangular. Elytra parallel-sided, about 2.5 times as long as width across humeri; base wider than prothorax; apex truncate; with short, sparse setae near apex.

Ventrite V in male little longer than IV; in females, about twice as long as IV. Legs moderately long; hind legs longer than fore- and middle legs. Femora clavate; inferior outer apex of profemora and inner apex of meso- and metafemora with short, but distinct spine. Tibiae laterally flattened, mainly meso- and metatibiae. Tarsomere I slightly shorter than II–III together.

Diagnosis. *Viracocha* gen. nov. shares with *Steinheilia* Lane, 1973 and *Streptolabis* Bates, 1867 the prognathous head with elongate mandibles. *Streptolabis* also shares with *Viracocha* antennae 12-segmented in male and 11-segmented in female. It is possible that males of *Steinheilia* also have antennae 12-segmented, but we could not examine specimens. *Viracocha* differs from *Steinheilia* as follows: body slender; elytra about 2.5 times as long as width across humeri; head distinctly more elongate behind eyes. In *Steinheilia* the body is distinctly wider, the elytra is, at most, 2.0 times as long as width across humeri, and the head is slightly elongate behind eyes. From *Streptolabis* it differs by the body slender, by the elytra not enlarged towards apex, and not reticulate. In *Streptolabis* the body is wider, and the elytra are enlarged towards apex and distinctly reticulate. Photographs of *Steinheilia* and *Streptolabis* are available from https://apps2.cdfa.ca.gov/publicApps/plant/bycidDB/wdefault.asp

Viracocha gen. nov. also resembles *Phimosia* Bates, 1870 and *Trachelissa* Aurivillius, 1912, but differs by the head prognathous (hypognathous in *Phimosia* and *Trachelissa*), and by the long mandibles (short in *Phimosia* and *Trachelissa*).

Etymology. Viracocha is the great creator god in the Inca mythology, a civilization which lived in Peru, country of the type locality of the new species. Masculine gender.

Figures 1-8. *Viracocha limogesi*: **1**) Dorsal habitus, holotype male; **2)** Lateral habitus, holotype male; **3)** Head, dorsal view, holotype male; **4)** Dorsal habitus, paratype female; **5)** Lateral habitus, paratype female; **6)** Head, dorsal view, paratype female; **7–8)** Dorsal habitus, paratype males.

***Viracocha limogesi* sp. nov.**

(Fig. 1–8)

Description. Holotype male (Fig. 1–3). Integument dark-brown, except for: central area of metathorax, close to metacoxae, orangish-brown; black narrow band on lateral and apex of ventrites; antennomeres

reddish-brown (lighter towards distal antennomeres), with dark apex; one each elytron two yellow callosities, one transverse, about middle, another smaller, more rounded, placed on distal third.

Head. Frons large; finely, densely punctate throughout; with short, abundant setae. Area between antennal tubercles and upper eye lobes finely, densely punctate close to antennal tubercles, coarser, sparser towards coronal suture; narrow area close to coronal suture smooth; area between base of antennal tubercles and posterior edge of upper eye lobes depressed, with short, moderately sparse setae. Antennal tubercles finely, densely punctate; with short, abundant setae. Dorsal area between eyes and anterior edge of prothorax with two types of punctures: moderately coarse on two-thirds closer to the eyes, sparser close to coronal suture; microsculptured on third closer to prothorax; area coarser punctate with short setae, laterally distinctly more abundant, interspersed with long, sparse setae close to eyes. Coronal suture distinct from clypeus to middle of area between eyes and prothorax; on frons placed on longitudinal elevation. Ocular carina narrow, well-marked from antennal tubercle to posterior edge of upper eye lobe. Area behind upper eye lobes moderately coarsely, abundantly punctate on region closer to eyes, gradually narrowed towards area of connection of ocular lobes; remaining surface microsculptured. Area behind lower eye lobes microsculptured, interspersed with shallow, coarse punctures on half closest to the eye. Genae finely, abundantly punctate, except for anterior edge smooth. Distance between upper eye lobes equal to 0.6 times length of scape; distance between lower eye lobes equal to 1.2 times length of scape. Mandibles coarsely, confluently punctate on dorsal and lateral sides. Submentum well-marked, microsculptured, interspersed with coarse, abundant punctures; sloped towards anterior carina; with moderately short, sparse setae. Antennae as long as 2.7 times elytral length, reaching elytral apex about distal third of antennomere VII; antennal formula (ratio) based on antennomere III: scape = 0.57; pedicel = 0.2; IV = 0.77; V = 0.80; VI = 0.80; VII = 0.71; VIII = 0.57; IX = 0.60; X = 0.60; XI = 0.56; XII = 0.69.

Thorax. Disc of pronotum shiny, glabrous, finely, sparsely, shallowly punctate. Lateral sides of prothorax glabrous. Anterior impunctate third of prosternum centrally with long, sparse setae. Prosternal process coarsely, abundantly punctate on subhorizontal area, except for narrow distal region, shallowly, sparsely punctate on vertical area. Metasternum microsculptured, laterally interspersed with fine, moderately abundant punctures, gradually sparser towards middle; glabrous, except for short, sparse setae close to ventrite I, distinctly longer near metacoxae. Scutellum glabrous. Elytra glabrous, finely, sparsely, shallowly punctate; outer apical angle rounded; sutural angle sub-rounded.

Abdomen. Ventrites I–IV finely, sparsely punctate; with short, sparse setae, slightly longer and more abundant on center of ventrite I; distal third of ventrite V fine, but distinctly coarser, more abundantly punctate than remaining ventrites; with short, moderately sparse setae on punctate area. **Legs**. Peduncle of femora moderately coarsely, shallowly punctate; metafemora, femoral clubs finely, sparsely punctate.

Female (Fig. 4–6). Antennae as long as 1.5 times elytral length, reaching about elytral apex; antennal formula (ratio) based on antennomere III: scape = 0.75; pedicel = 0.22; IV = 0.75; V = 0.77; VI = 0.69; VII = 0.60; VIII = 0.45; IX = 0.40; X = 0.38; XI = 0.58. Metasternum centrally with long, sparse setae.

Variability. The callosities of elytra can be brownish. Dorsal area of head, between upper eye lobes sometimes with large smooth or nearly smooth area; dorsal area of head, between upper eye lobes and antennal tubercles with one coarse, deep, elliptical puncture on each side of coronal suture. Frons without central elevation at area of coronal suture. Antennae (Fig 7–8) from 2.4 to 3.0 times elytral length, reaching elytral apex from basal third to distal third of antennomere VII. Inner margin of mandibles not denticulate.

Dimensions in mm (male/female). Total length, 11.90–15.90/13.10; length of prothorax at center, 2.1–2.7/2.6; anterior width of prothorax, 1.85–2.35/2.05; posterior width of prothorax, 2.30–2.80/2.55; humeral width, 2.85–3.20/3.30; elytral length, 7.30–9.00/8.00. The largest dimensions are those of the holotype.

Type material. Holotype male from PERU, *Junin*: Satipo (Rio Venado), IX.2014, local collector (MZSP). Paratypes – 3 males (IMCQ), 1 female (MZSP) same data as holotype.

Etymology. The new species is named after René Limoges, entomological technician at IMCQ.

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